

Measles, Mumps & Rubella Activity in the U.S.**National Immunization Program (NIP), Centers for Disease Control & Prevention****Measles**

No measles cases were reported to MMWR through Week 3 of 2006. Two imported cases from the Ukraine and one imported case from India were reported to NIP during Week 3. One case of SSPE was reported this week by MA Department of Health (see below).

INDIANA – 1 import / Ukraine

Monroe County, Indiana confirmed measles in a University student infected in the Ukraine, rash onset **1/18/06**. The student's IgM serology was positive by IFA assay at the State lab and confirmed by EIA IgM at CDC (highly positive). The measles sequence from the viral sample was a **D6**. The D6 is very similar to sequences seen from viruses in Russia, Turkey, and Armenia. The student was not vaccinated against rubeola. He traveled to the Ukraine 12/18/06 and returned to Bloomington on 1/9/06. Prodromal symptoms began 1/15/06. Symptoms included fever, cough, coryza, and conjunctivitis. He did not attend classes while ill but visited the hospital and the Student Health Center (SHC).

NEW MEXICO – 1 import / Ukraine

Albuquerque, New Mexico reported measles in a 4 month old male arriving from the Ukraine on 1/23/06, rash onset **1/24/06**. Flight numbers were: Polish Airline Lot # 001 Kiev to Warsaw to Chicago; Frontier Airlines # 544 Chicago to Denver; (stayed overnight in Denver); Frontier #333 departed Denver 8:30 am; arrived Albuquerque at 9:40 a.m. 1/24/06. Colorado followed up with airport shuttle and hotel staff in Denver. The 4 month old had been given immune globulin in the Ukraine on 1/8 when his 18-mo-old brother was diagnosed with measles. The mother was also given immune globulin at 1/8. The 18-mo-old sibling had a positive IgM by capture ELISA for measles collected 1/26/06 by the New Mexico State Lab. The 4-month-old U.S. case had rash only. Results on 2 samples run by capture ELISA on the 4-month-old: First collected 1/25/06 P/N ratio of 2.5; Second collected 1/26/06 P/N ratio of 4.2 (cut-off for positive 4.5). The sequence from the direct PCR of the viral NP was analyzed at CDC and was D6.

CALIFORNIA – 1 import / India

California reported measles confirmed in a foreign graduate student hospitalized in Santa Clara, rash onset **1/26/06**. Few details are available at the time of this report but a few fellow students visited the case in the hospital before infection control procedures were in place.

2006 Table 1: U.S. Measles Cases confirmed (N=3) by rash onset

Case #	State	Age	Rash Onset	Vaccinated	Spread	Rept'd to the MMWR	Viral specimens	Comments / Source /Outbreak related
01 Import	IN	20 y	1/18/06	No	Unk	--	Yes,D6	US college student who traveled to the Ukraine 12/18/05 – arrived back in Indiana 1/9/06.
02 Import	NM	4 mo	1/24/06	No, too young	Unk	--	Yes, D6	Child born in the Ukraine. Rash only, no ccc's. Rec'd immune globulin 1/8/06 in the Ukraine. Airline protocol followed for 1/23/06 arrivals.
03 Import	CA	20 y	1/26/06	No	Unk	--	No	Foreign student returning from India; date of arrival to be determined

SSPE – The Massachusetts Department of Public Health reported a possible subacute sclerosing panencephalitis in a 20-year-old pregnant female born in Cape Verde. According to her mother, the patient had measles disease at 4 months of age and vaccination history of receiving 3 doses of MCV at ages 11 months, 17 years and 18 years. Preliminary results on the CSF and serum were measles IgG positive by CDC laboratories.

Mumps - Five mumps cases were reported to MMWR as of Week 3 from 5 states (CA, IA, MD, MI, NC). Two of the cases had onsets in 2005.

Two mumps cases reported to NIP during Wk 3:

Georgia reported one case of mumps imported from Japan in Georgia. The Japanese child was unvaccinated and was IgM positive for mumps. Reported to have been in daycare in Japan where other children in the facility were diagnosed with mumps. The family traveled to the U.S. and child displayed symptoms the day after arrival (dates unknown at time of this report). No complications occurred.

New York State (Nassau County) reported that a 21 year old woman was hospitalized for aseptic meningitis secondary to mumps on November 15-17, 2005. Her mumps IgM was positive and she had history of one MMR vaccine and a second single measles for college admittance. The case lives at home, attends college and works in a restaurant. The County did not have any known source for the illness and no contacts developed disease. The State has requested medical record from the hospital.

Rubella

No new cases of rubella were reported to MMWR during Weeks 1-3, 2006. One rubella IgM positive case was reported to NIP by Connecticut in a 49-year-old Russian female (unimmunized), rash onset 1/2/06 after returning from a visit to Russia. She had known exposure to rubella during her visit in Russia. Her symptoms include rash, low grade fever, sore throat, lymphadenopathy, and joint pain.

2006 Table 2: U.S. Rubella Cases confirmed (N=1) by rash onset

Case #	State	Age	Rash Onset	Vaccinated	Spread	Rept'd to MMWR	Viral Specimens	Comments/Source/Outbreak
01	CT Imp	49 y	1/2/06	No	Unk	No	No	Country of birth – Russia

CRS

No cases of Congenital Rubella Syndrome (CRS) were reported to the MMWR through Week 3 for 2006. Arizona reported investigating a suspected CRS (2005 case) in a 34-week neonate who presented with blueberry muffin, thrombocytopenia and hepatosplenomegaly (HSM), but no obvious congenital defects documented. At an initial U.S. prenatal visit (6/6/05) the mother was rubella-susceptible. The newborn was rubella IgM positive by a commercial lab. The newborn and mother were RPR+ (rapid plasma reagin); both being treated. Multiple specimens have been sent off for viral cultures and testing. The differential diagnosis was CRS vs CMV (cytomegalovirus).

Please send questions or comments to Gustavo Dayan, M.D., MMR Team at NIP; or to Susan B. Redd at sbr1@cdc.gov; fax (404) 639-8665; ph (404) 639-8763. We appreciate being informed of measles, rubella or mumps activity in your project area.
